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I. INTRODUCTION

McKesson has proposed constructions for disputed claim terms that are clearly articulated, directly supported by the language of the claims themselves, and consistent with the full context of the disclosed inventions, as described in the definitional guidance provided by the patent specifications. McKesson relies on the intrinsic record as support for its construction and has demonstrated that the prosecution history and extrinsic evidence further confirm the meaning of the disputed terms. McKesson does not run from the claims and specifications of its patents but rather embraces the clarity and guidance that the patents offer to the construction analysis.

The Defendants, on the other hand, seek to confuse the claim construction process by offering constructions that are muddled, completely out of context of the disclosed invention, contrary to the plain and ordinary meaning of the claim language, and inconsistent with and/or not required by the patent specifications. Defendants' proposed constructions are result-oriented conclusions that are not driven by the claims and specifications of the patents, but rather by a transparent effort to rewrite the claims in a way that bolsters perceived non-infringement arguments.

This can be easily seen with the Defendants' proposed construction of the "x, y coordinate location" phrase, where the Defendants propose a rote dictionary definition without considering the context of the patented system. Indeed, Defendants' proposal for this claim term conveniently omits reference to or analysis of the claim language that actually breathes life into the term within the context of the claimed system. Further confirmation comes from Defendants' proposed construction of the claim term "package reader associated with picking means" from the '110 patent, where Defendants seek to add limitations to the construction that simply are not required by the intrinsic or extrinsic evidence, and that unnecessarily narrow the plain language of the claims. Finally, Defendants' "means-plus-function" constructions each

suffer from the same malady, they seek to add structure to the proposed construction that simply is not required by the claimed function.

McKesson respectfully urges the Court to reject Defendants' proposed constructions and to adopt the constructions for the asserted claims set forth in McKesson's Opening Claim Construction brief. D.I. 351. For the convenience of the Court, McKesson attaches as Exhibit J to this brief a claim construction chart that sets forth both McKesson's and Defendants' proposed constructions for the asserted claims.

II. **RESPONSE TO DEFENDANTS' ERRONEOUS CONSTRUCTION PROPOSALS FOR "X, Y COORDINATE" AND "X, Y COORDINATE LOCATION"**

McKesson's Proposed Construction: "one or more points that designates the position of a package where the picking means selects, grabs and replaces packages."

Defendants' Proposed Construction: "plain and ordinary meaning – *i.e.*, a location identifier "X, Y," in which X designates a position of the location along an X-Axis and Y designates a position of the location along a Y-axis."

The parties' definitions of "x, y coordinate location" and "X and Y coordinate" (collectively "x, y coordinate location") similarly define an "x coordinate" or a "y coordinate." Both parties also agree that these claim terms should be given ordinary and customary meaning. Both parties further agree that the specification and prosecution history do not deviate from the plain and ordinary meaning of "x, y coordinate location." The parties disagree, however, regarding the identification of the area, or place in space, that defines the boundaries in which the "x, y coordinate location" may exist. McKesson's proposal requires an identified area or place in space for the "x, y coordinate," Defendants' proposal does not.

McKesson proposes a construction that begins with the claim language, and thus parallels the language and intent of the patents. This results in a proposed construction that includes the necessary frame of reference for the x, y coordinate location, *i.e.*, the plane or space where

packages are stored and which the picking means can access. In contrast, the Defendants' proposed construction appears to be derived from definitions found in Wikipedia.com and Merriam-Webster.com, and thus provides no context whatsoever for this claim term. *See* Defendants' Corrected Opening Claim Construction Brief (Defendants' Opening Brief), p. 12, n.3. The error in Defendants' proposal is that it construes the claim term in a vacuum, devoid of the context provided by the claim language. Because the proposal seeks to construe the term in a vacuum, it suffers from the overbreadth errors and contextual shortcomings that the Federal Circuit warned against in *Phillips* when criticizing the use of dictionary definitions. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005).

Beyond this, even the dictionaries put forth by the Defendants include a frame of reference for the described x, y coordinate system. Thus, Defendants propose a construction that not only ignores the context of the claim and deviates from the express claim language and intrinsic record, but also contradicts their own extrinsic evidence.

A. Defendants' Proposed Construction Is Erroneous Because It Fails to Consider the Context of the Claims

Defendants propose that "x, y coordinate location" be construed to mean "a location identifier 'x, y,' in which X designates a position of the location along an X-Axis and Y designates a position along a Y-axis."¹ Defendants Opening Brief, p. 11. While it is true that this term is used, at a high level, to designate a position or location identifier, the Defendants' proposed construction fails to instruct where in the plane of the claimed system this location

¹ On August 28, 2008, Defendants informed McKesson of their intention to add the term "X, Y" after the word "identifier" to their construction of the claim terms "x, y coordinate" and "x, y coordinate location." McKesson objects to this change in Defendants' construction after the filing of initial claim construction briefs. McKesson believes that the arguments below apply equally to either of Defendants' constructions.

exists. As such, Defendants' proposed construction violates the fundamental rule that the claim construction focus begins with and remains on the language of the claims, as the claims consistently refer to x, y coordinates in relation to packages held in a storage area location that are accessible to the picking means. *Interactive Gift Exp. Inc. v. Compuserve, Inc.*, 257 F.3d 1323, 1331 (Fed. Cir. 2001). Defendants' proposed construction thus suffers from the significant flaw of being derived from dictionary definitions rather than from the surrounding words of the claim. This violates fundamental rules of claim construction. *See ACTV Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003).

There is no need to begin the claim construction analysis here with dictionary definitions. Indeed, the claim language clearly explains that the frame of reference for the "x, y coordinate location" is the place where the picking means places and selects, or picks, packages. *See, e.g.*, McKesson's Opening Claim Construction Brief (McKesson's Opening Brief), Exh. A, col. 13, lns. 12-14; Exh. B, col. 13, lns. 10-15. Defendants devote eight pages of their opening claim construction brief to a discussion of this claim term, yet not one of those pages provides analysis of how the "x, y coordinate" or "x, y coordinate location" is used in the context of the independent claims. This singular failure results in an erroneous and flawed proposal.

In *Phillips*, the Federal Circuit warned against doing exactly what the Defendants have done here, beginning claim construction analysis with generic, out-of-context dictionary definitions. *Phillips*, 415 F.3d at 1320. Indeed, the Court advised that the "risk of systematic overbreadth" could be substantially corrected if claim construction analysis began, instead, with the claims, specification, and prosecution history. *Id.* As stated in *Phillips*:

The main problem with elevating the dictionary to such prominence is that it focuses the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent ... *heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim*

term to the artisan into the meaning of the term in the abstract, out of its particular context... “[T]here may be a disconnect between the patentee’s responsibility to describe and claim his invention, and the dictionary editors’ objective of aggregating all possible definitions for particular words.”

Id. at 1321 (emphasis added).

The Federal Circuit’s warning is particularly pertinent here. A close examination of Defendants proposed construction shows that page 12 of Defendants opening brief begins the claim construction analysis of this term with the “plain and ordinary meaning of x, y coordinate”, as provided by Wikipedia.com and Merriam-Webster.com. Defendants’ Opening Brief, p. 11, n. 12. Defendants’ proposed construction thus undeniably seeks to construe the “x, y coordinate” in a vacuum, without any consideration of the claims in which the phrase “x, y coordinate location” appears. *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (stating that the ordinary meaning of a term cannot be construed in a vacuum; rather, a court must “must look at the ordinary meaning in the context of the written description and the prosecution history”). Had Defendants looked to the usage of this term in the independent claims, any proposed construction necessarily would have included an appropriate frame of reference because the claims link the “x, y coordinates” to storage area locations that are accessible to picking means.

Moreover, Defendants’ dictionaries are inconsistent with their proposed construction because Defendants selected only a portion of the definition, and failed to mention that each of the cited dictionaries specify that the x, y coordinate in a Cartesian coordinate system must have a frame of reference:

“In mathematics, the Cartesian coordinate system (also called rectangular coordinate system) is used to determine each point uniquely in a plane through two numbers, usually called the *x-coordinate* or abscissa and the *y-coordinate* or ordinate of the point.” Declaration of Bryan N. DeMatteo in Support of

Defendants' Opening Brief on Claim Construction (DeMatteo Decl.) Exh. G, Wikipedia.com definition (emphasis added).

"Cartesian coordinate systems are also used in space (where three coordinates [x, y, z] are used) and in higher dimensions." DeMatteo Decl. Exh. G, Wikipedia.com definition (emphasis added).

"1 : either of two coordinates that locate a point on a plane and measure its distance from either of two intersecting straight-line axes along a line parallel to the other axis 2 : any of three coordinates that locate a point in space and measure its distance from any of three intersecting coordinate planes measured parallel to that one of three straight-line axes that is the intersection of the other two planes." McKesson's Response Brief, Exh. K, Merriam-Webster.com definition (emphasis added).

Similarly, the example provided by Defendants on page 12 of the opening brief provides a frame of reference for the x, y coordinate plotted at point [3, 2]. The frame of reference is the graph on the piece of paper. Thus, Defendants' proposal is belied by the very sources upon which they rely and, instead, those sources confirm that any definition of "x, y coordinate" include a relevant frame of reference.

McKesson's proposal provides the frame of reference that Defendants' proposal lacks. Indeed, McKesson's proposed construction begins with the words of the claims. As a result, McKesson's proposal is consistent with both the claim language and the plain and ordinary meaning of the phrase. When the Court starts with the claim language, as it must, the relationship between the "x, y coordinate location" and the picking means becomes apparent.

Defendants' out-of-context definition suffers from the same maladies warned against by the Federal Circuit in *Phillips*. It should thus be rejected, and the Court should accept the plain and ordinary meaning of this claim phrase, as proposed by McKesson.

B. Defendants' Selective Citation to the Specification and Prosecution History Ignores The Disclosed Relationship Between The Picking Means and The X, Y Coordinate Location

When citing to the specification, Defendants omit portions of sentences and paragraphs that include the picking means as part of the frame of reference for the “x, y coordinate location.” Significantly, the specification informs one of skill in the art that there are “two important common features” of the racks. Defendants rely on only the first one – the locations having known x, y coordinates. Defendants’ Opening Brief p. 13; McKesson’s Opening Brief, Exh. A, col. 5, ln. 41-42. Defendants turn a blind eye to the second important common feature – sufficient clearance between packages to allow the automated picking means to select, grab and replace individual packages, because this feature demonstrates the relationship between the known x, y coordinates and the automated picking means. McKesson’s Opening Brief, Exh. A, col. 5, ln. 46-48. Other parts of the specification cited by the Defendants also tie the x, y coordinate location to the picking means. *See, e.g.*, Defendants’ Opening Brief, p. 16 citing col. 5, ln. 56 to col. 6 ln. 2 (unambiguously explaining that the picking means accesses the x, y coordinate location.)

Indeed, each time the patentees refers to the x, y coordinate location, there is a concomitant reference to a place within the storage area, holding means, supply structure or storage/supply rack that the picking means can access. Yet another inconsistency with the Defendants’ proposed construction is the fact that the specification fails to describe other parts of those structures, which the picking means could not access, as having any meaning in relation to the claimed invention. For example, each and every rack of the preferred embodiments in Figures 3-5 are arranged and placed within the system such that the picking means can access the x, y coordinate location depicted therein. Indeed, as shown in Figure 1, supply rack 20 does not fall within the scope of claim 1 of the ‘267 patent when it is located at the Check Station or

Return Station. It only falls within the claim when it is located in a position that is accessible to the picking means.

Finally, the statements regarding Pohjonen and the European Patent in the prosecution history do not disavow a frame of reference for the x, y coordinate locations. Applicants' statements regarding those references are completely consistent with an understanding that a frame of reference is needed, and the references were distinguished on other grounds.

C. The Dependent Claims in the Asserted Patents Do Not Support Defendants' Proposed Construction

Dependent claim 20 of the '110 patent also fails to assist Defendants' proposed construction. Defendants' Opening Brief, p. 16. In arguing that claim 20 supports its litigation-induced construction, Defendants completely gloss over the claim language. A plain reading of claim 20 shows the rationalization for the omission. Claim 20 requires a picking means which is able to turn 180 degrees to pick packages from storage locations opposite and facing one another. McKesson's Opening Brief, Exh. A, col. 14, ln. 40-52. The claim does not, as Defendants suggest, recite two separate storage areas positioned opposite and facing one another. Defendants' Opening Brief, p. 16-17.

Indeed, the plain language of claim 20 is inconsistent with Defendants' proposed construction and arguably renders claim 20 invalid because that claim necessarily includes storage area locations occupying the exact same x, y coordinate, albeit in different picking planes. By failing to include a relevant picking plane in their proposed construction, Defendants render claim 20 in direct conflict with the "distinct x, y coordinate" language of claim 1. McKesson's proposal, to the contrary, squares with the language of both claim 1 and claim 20 because distinct x, y coordinates can exist at the same x and y values when the picking plane is properly described.

Defendants argue that Figure 1 shows two separate storage areas. Defendants' Opening Brief, pp. 16-17. This argument, however, finds no support in claim 20 or the specification. Instead, Defendants rely on an unsupported conclusion from their own expert, again without providing any citation to the intrinsic record or other evidence in support of this contention. *Id.* In any event, regardless of whether Figure 1 shows one or two storage areas, it is undisputed that claim 20 covers the situation where one storage area has locations opposite and facing one another. This is confirmed by the language of claims 1 and 20, read together. Defendants' proposed construction of this phrase is flawed because using this construction, Figure 1, a preferred embodiment, would fall outside of the scope of claim 20 because packages can be held at the same x, y coordinate of different picking planes. This further demonstrates precisely why the "x, y coordinate location" claim phrase can only rationally be interpreted in light of the intended purpose of the disclosed invention.

Claim 6 of the '267 patent suffers the same pitfalls under Defendants' proposed construction. Figure 6 shows identical rods extending from the same center point. Again, this would result in rods having the same x, y coordinate location if the picking plane were deemed irrelevant, as proposed by Defendants. McKesson's proposed construction creates no such inconsistency with the claim language and results in inclusion of the preferred embodiments. This is because McKesson's proposed construction recognizes that the x, y coordinate is defined relative to a frame of reference.

D. Defendants' Proposal Results In an Inoperable System

Finally, it is unclear where the x, y coordinate locations in the claimed system could exist under Defendants' proposed construction. Among other things, Defendants' proposal eliminates the claim requirement that packages be "held in a manner so that each package can be placed into and removed from the storage area locations." McKesson's Opening Brief, Exh. B, col. 13,

Ins. 6-8. Instead, according to Defendants' construction, every package in a system could be assigned an x, y coordinate location that would constitute a storage area location, regardless of whether the picking means could ever access that particular x, y coordinate. Defendants' interpretation is contradicted by claim 1.

It is also possible under Defendants' proposal to construct a system where no x, y coordinate is accessible to the picking means, thus rendering the claimed system inoperable. In such a system, packages could never be placed into, selected from, or picked from storage area, but would still have "locations having distinct x, y coordinates." Defendants' proposed construction should be rejected for this reason as well, as it highlights the absurdity that results when a proposed claim construction veers from the context of the claimed invention. *See generally Talbert Fuel Sys. Patents Co. v. Unocal Corp.*, 275 F.3d 1371, 1376 (Fed. Cir. 2002), *vacated and remanded on other grounds*, 537 U.S. 802 (2002) (noting that a construction that renders the claimed invention inoperable should be viewed with extreme skepticism); *see also Modine Mfg. Co. v. United States Int'l Trade Comm'n*, 75 F.3d 1545, 1557 (Fed. Cir. 1996), *overruled on other grounds*, 535 U.S. 722 (2002).

III. RESPONSE TO DEFENDANTS' ERRONEOUS CONSTRUCTION PROPOSAL FOR THE "PACKAGE READER ASSOCIATED WITH THE PICKING MEANS"

McKesson's Proposed Construction: "a device that provides the identity of a package to the computer directing the picking means."

Defendants' Proposed Construction: "a package reader attached to the picking means."

Defendants' proposed construction here improperly seeks to limit the claim language to a preferred embodiment, despite clear claim language showing broader meaning and legal authority that warns against precisely the type of limiting construction proffered by Defendants. The claim language is straightforward. McKesson offers a claim construction that is centered on

the claim language, as interpreted by the entire intrinsic record, and that is well understood by those skilled in the art. In contrast, Defendants begin their argument by improperly imparting a “pre-pick verification function” into the claim language. *See* Defendants’ Opening Brief, p. 19. While the specification does describe this function with regard to one embodiment, neither the claims nor the specification describe this functionality as essential or required.

A. The Claims and Specification Are Not Limited in The Manner Defendants’ Argue

Indeed, it is the claims that tell the story here. Contrary to Defendants’ proposed construction, the claim language clearly states that the bar code reader is merely “associated with” the picking means. There is no support in the claims for Defendants’ narrowing rewrite, particularly because the inventors clearly knew how to “attach” something to the picking means, as evidenced by the express language of claim 3 of the ‘110 patent. The baggage that Defendants seek to slip into the construction is not required by the claims and, at best, amounts to reading limitations from an embodiment in the specification into the claims.

Defendants, looking at one embodiment disclosed in the patent, base much of their argument on their contention that the ‘110 patent “discloses no other way of performing the pre-pick verification function other than by attaching a package reader to the picking means.” *See* Defendants’ Opening Brief, p. 19. Not only does this argument fail because it creates an artificial “pre-pick verification” limitation which is not required by the claim language, but also because it flies in the face of Federal Circuit precedent on claim construction. Indeed, the Federal Circuit has noted on many occasions that an applicant is not required to describe in the specification every conceivable and possible future embodiment of his invention. *See SRI Int’l v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (noting that “if structural claims were to be limited to devices operating precisely as a specification-described

embodiment is operated, there would be no need for claims. Nor could an applicant, regardless of the prior art, claim more broadly than the embodiment.”). In short, as the Federal Circuit noted in the *SRI* case, it is the claims that measure the invention, as informed by the specification. In the words of the Federal Circuit, “[s]pecifications teach. Claims claim.” *Id.* at 1121. Here, claim 1 shows an association between the package reader and picking means, not the “pre-pick verification” or physical attachment requirements posited by Defendants.

To avoid importing limitations from the specification into the claims, the Federal Circuit instructs that it is important to be mindful of the purposes of the specification, to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1532 (Fed. Cir. 1987). One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example. *Phillips*, 415 F.3d at 1323. Frequently, upon reading the specification in the correct context, it becomes clear whether the patentee is setting out specific examples of the invention to accomplish those goals or, instead, whether the patentee intends the claims and the embodiments in the specification to be strictly coextensive. *Id.* The manner in which the patentee describes the invention in the specification and claims usually will make the distinction apparent. *Id.*

The claims and specification in the ‘110 patent make apparent that the inventors used the specification to describe examples to assist in practicing the claimed invention, not to indicate that the claims and disclosed embodiments were coextensive. An examination of the claim scope should begin with the “Summary of the Invention,” as this is often a “pertinent place to shed light upon what the patentee has claimed.” *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1345 (Fed. Cir. 2001). When this examination is conducted, one finds only one reference to the

package reader, stating that “[w]e prefer to provide a bar code reader for reading item packages.” McKesson’s Opening Brief, Exh. A, col. 3, lns. 24-25. Not only does this reference unquestionably teach that the reader need not be physically “attached” to the picking means, but it makes clear that the bar code reader is a preference, not a necessity. This is demonstrated by the ‘267 patent, whose independent claims do not recite a bar code reader of any kind.

One of the disclosed embodiments demonstrates that a package reader can be attached to the picking means, but the specification makes abundantly clear that this is but one example: “The picking means 38 can also include means, such as a bar code reader 26 as shown in Fig. 7, for determining the identity 16 of a package....” *Id.*, col. 6, lines 9-12. In other words, the picking means can include a package reader, but it also cannot. This is confirmed by review of the language of the specification specifically describing the picking means, which notably contains no mention of an attached package reader. *See id.*, col. 7, lines 45-56. This confirmation should come as no surprise, since the meaning of the term “associated with” is indisputably broad enough to cover both systems where a package reader is physically attached to the picking means and systems where the picking means is elsewhere, but performs the same claimed functionality.²

² A review of the patent specification for intended meaning of usage of the phrases “associated” and “attached” further confirms the fallacy in Defendants’ proposed construction. The term associated appears in the specification three times but not in reference to the package reader. These uses of “associated” show that the inventors understood the word to include both physical co-location and non-physical co-location of items. (“The gripper assembly preferably has a movable rod or other carrier for holding selected items, at least one vacuum head and associated controls for gripping and moving selected items.” McKesson’s Opening Brief, Exh. A, col. 3, lns. 21-24) (“We provide a processing unit with associated memory and data entry peripherals.” McKesson’s Opening Brief, Exh. A, col. 3, lns. 30-31) (“The obtaining means 50 also preferably includes an extension rod 52 in fluidic communication with a pneumatic in/out cylinder 53 and associated valve 59, as shown in FIGS. 8 and 11.” McKesson’s Opening Brief, Exh. A, col. 8, lns. 4-7) (“Column 44 moves along the respective tracks 42 to pick a given package 14 from a

In any event, the claims and specification clearly indicate that the inventors in no way demonstrated a clear intent to limit the claim scope. There is no express statement confirming that the picking means of the claimed invention requires a physically attached package reader to accomplish its intended purpose, particularly in light of the intentionally broad claim language. Moreover, the inventors made clear in the specification that “[a]lthough the invention has been described in detail in the foregoing embodiments for the purpose of illustration, it is to be understood that such detail is solely for that purpose and that variations can be made therein by those skilled in the art without departing from the spirit and scope of the invention....”

McKesson’s Opening Brief, Exh. A, col. 12, lns. 58-64. While the public is entitled to rely upon the language in the specification, the evidence here shows that the patentees used statements about the invention that were very broad in scope. This is significant evidence against Defendants’ proposed construction.

When the claim language is assessed on its own, and when the written description is examined carefully, one finds that the patentees described an invention that embraces, through the phrase “associated with,” package readers that may be either “attached” or “separate” from the picking means. McKesson’s proposal is consistent with this interpretation. Defendants’ is not.

corresponding support rod 30, or restock a support rod 30 with an associated package 14.” McKesson’s Opening Brief, Exh. A, col. 8, lns. 62-65). In contrast, the specification uses the term “attached” several times to denote a connection or co-location of items. (See McKesson’s Opening Brief, Exh. A, col. 5, lns. 29-30; col. 7, lns. 49-50, 60-61; col. 8, lns. 7-9, 24-28).

B. The Prosecution History Does Not Contain a Clear and Unambiguous Disavowal of Claim Scope

Defendants next urge the Court to erroneously limit the meaning of this broad claim language based upon a purported disavowal of claim scope in the prosecution history, despite the fact that this would violate several well-established legal precepts. Specifically, a court's reliance on prosecution history, the Federal Circuit has warned, must be tempered with the recognition that a "prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation." *Phillips*, 415 F.3d at 1317. As such, it is important to acknowledge that a prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* Prosecution disclaimer is thus not appropriate in instances where the alleged disavowal of claim scope is ambiguous. *Seachange Int'l, Inc. v. C-COR Inc.*, 413 F.3d 1361, 1373 (Fed. Cir. 2005) ("A disclaimer must be clear and unambiguous."); *Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc.*, 249 F.3d 1341, 1348 (Fed. Cir. 2001) (finding no clear disclaimer because "a person of reasonable intelligence would not be misled into relying on the erroneous statement, for it is contrary not only to the plain language of the claims and the specification, but also to other statements in the same prosecution document"). Instead, arguments or disavowals in the prosecution history must be deliberate, unambiguous, and explicit. *See Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985) (requiring such statements to be express representations).

As the Federal Circuit explained in *Schwing GmbH v. Putzmeister Aktiengesellschaft*, "[a]lthough prosecution history can be a useful tool for interpreting claim terms, it cannot be used to limit the scope of a claim unless the applicant took a position before the PTO that would lead a competitor to believe that the applicant had disavowed coverage of the relevant subject

matter.” 305 F.3d 1318, 1324 (Fed. Cir. 2002). Additionally, and key to this analysis, the statements or disavowals must directly address the disputed term. *Id.* Only where these conditions are met, and where the evidence in the prosecution history does not contradict the language of the claims, is it proper for the court to consider such evidence in determining the correct interpretation. If the locus of the argument does not center on the disputed term, a court will face an ambiguity as to whether the statement or disclaimer affects the inventor’s belief in the scope of the disputed term.

For example, in *Purdue Pharma L.P. v. Endo Pharmaceuticals Inc.*, 438 F.3d 1123 (Fed. Cir. 2006), the Federal Circuit reviewed a district court’s claim construction of the term “controlled release.” *Id.* at 1135-36. Although the term had properly been construed as to not contain a limitation regarding dosage, the district court looked to the prosecution history and found a deliberate surrender of drug formulations outside of a prescribed dosage range. *Id.* at 1136. The Federal Circuit reversed, holding that the disclaimer did not directly address an interpretation of the term “controlled release,” but merely distinguished the prior art on the “discovery” of the prescribed dosage range. *See id.* Thus, the disavowal did not unambiguously limit the disputed term. *See id.* The district court erroneously broadened its consideration of the prosecution history past its preliminary task of interpreting specific claim language. *See id.* at 1136-37 (“Without any specific claim language to interpret, however, the trial court impermissibly imported a limitation into the claims.”).

Similarly here, close scrutiny of the prosecution history reveals that any purported disclaimer relates to the positioning of the package reader relative to the location of the package, not to the direct question of whether the package reader’s “association with” the picking means requires physical attachment. As such, the inventors’ arguments distinguishing Morello cannot

operate either as a redefinition of the claim term “associated with” or as a disclaimer of any particular interpretation of that term.

In any event, even if the inventors had attempted to disclaim or redefine something here which, as described above, they did not, the patent examiner did not permit the disclaimer. Instead, the examiner properly identified the claim scope as being broader than the description of the embodiment in the specification. *See* McKesson’s Opening Brief, Exh. E, MA000219. A reasonable competitor of McKesson’s, reading the prosecution history in its entirety, would not conclude that the inventors had disavowed coverage of the claim language, as the examiner’s remarks made clear that the broad claim language could not be limited by the specification here. The prosecution history should thus not be used to limit the scope of the claim language. *Schwing GmbH*, 305 F.3d at 1324-25 (Fed. Cir. 2002) (“[P]rosecution history ... cannot be used to limit the scope of a claim unless the applicant took a position before the PTO that would lead a competitor to believe that the applicant had disavowed coverage of the relevant subject matter.”).

The examiner’s recognition of the conflict between the narrow construction proposed by Defendants and the broad language provided by claim 1 of the ‘110 patent highlights yet another reason for rejecting Defendants’ proposal. Representations made by an applicant during prosecution cannot be used to enlarge the content of the specification. *Biogen, Inc. v. Berlex Labs., Inc.*, 318 F.3d 1132, 1140 (Fed. Cir. 2003). The focus of claim interpretation is not on the subjective intent of the patentee but rather “on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean.” *Id.* Critically, the patent examiner’s interpretation of the claim language here provides strong evidence of how one of ordinary skill in the art would have objectively understood this claim term at the time of the

invention. Defendants' proposed construction runs counter to the understanding of one of ordinary skill in the art, and should be rejected for this reason as well.

IV. RESPONSE TO DEFENDANTS' ERRONEOUS CONSTRUCTION PROPOSALS FOR "PICKING MEANS/AUTOMATED PICKING MEANS/MEANS FOR PICKING MEDICINE PACKAGES/PICKING MEANS FOR PICKING PACKAGES" AND "MEANS FOR OBTAINING A MEDICINE PACKAGE/OBTAINING MEANS"

McKesson's Proposed Construction, Claim 1 of the '110 Patent: "The disclosed function is to hold packages and to select and place packages in the storage area locations. The corresponding structure is a device that includes a housing, a gripper, an extension rod and a storing rod as disclosed at col. 7, lines 57-64 and in Fig. 7."

Defendants' Proposed Construction, Claim 1 of the '110 Patent: "Function: to hold packages, to select packages from the storage area locations and place packages in the storage area locations in accordance with computer controlled instructions. Corresponding Structure: Picking means 38."

McKesson's Proposed Construction, Claim 1 of the '267 Patent: "The disclosed function is the picking of medicine packages from the support rods. The corresponding structure is a device that includes a housing, a gripper, an extension rod, and a storing rod as disclosed at col. 7, lines 57-64 and Fig. 7."

Defendants' Proposed Construction, Claim 1 of the '267 Patent: "Function: picking medicine packages from the support rods in accordance with instructions received from a computer. Corresponding Structure: Picking means 38."

McKesson's Proposed Construction of Obtaining Means: "The disclosed function is the obtaining of a medicine package. The corresponding structure is a device including a suction head, vacuum generator and an extension rod as disclosed at col. 7, line 60 – col. 8, line 33 and Figs. 7 and 11."

Defendants' Proposed Construction of Obtaining Means: "Function: Obtaining a medicine package. Corresponding Structure: obtaining means 50."

A. Defendants' Proposed Construction of the "Picking Means" in Claim 1 of the '110 Patent and Claim 1 of the '267 Patent Is Erroneous Because It Includes Structures Unrelated to the Recited Claim Function

Both parties agree that the picking means/automated picking means in claim 1 of the '110 patent and the means for picking packages of claim 1 of the '267 patent should be construed in accordance with the statutory requirements of 35 U.S.C. § 112 ¶ 6. These terms should be

construed to cover the structure disclosed in the specification necessary for performing the recited functions, which are (1) to hold packages and to select and place packages in the storage area locations for claim 1 of the '110 patent; and (2) picking medicine packages for claim 1 of the '267 patent. *Micro Chemical, Inc. v. Great Plains Chemical, Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

Defendants ask the Court to construe "picking means" and "automated picking means" as picking means 38. The specification states that picking means 38 can include a variety of structures unrelated to the recited functions, including to name a few:

- an identifying means or bar code reader to identify packages (McKesson's Opening Brief, Exh. A, col. 7, lns. 64-67);
- vacuum sensor 58a for sensing when a package is properly positioned on the suction head (McKesson's Opening Brief, Exh. A, col. 8, lns 14-16); and
- pusher plate 57B attached to cylinder 57A to push drugs off the storing rod during the dump process (McKesson's Opening Brief, Exh. A, col. 8 lns, 22-30).

Defendants' proposal fails to set forth with specificity the specific structure it believes is necessary for accomplishing the recited function. As a result, Defendants' proposal necessarily includes structure from the specification beyond that necessary to perform the claimed function and should thus be rejected. *Micro Chemical*, 194 F.3d at 1258 (§112, ¶6 does not "permit the incorporation of structure from the written description beyond that necessary to perform the claimed function.").

B. Defendants' Proposed Construction of the Picking Means of Claim 7 Is Erroneous Because The Claim Recites Detailed Structure That Overwhelming Overcomes the Presumption of Means Plus Function Treatment

Regarding the picking means disclosed in claim 7 of the '267 patent, Defendants fail to offer a single reason why the detailed recitation of structures in that claim does not rebut the § 112, ¶ 6 presumption. Claim 7 identifies specific structures for accomplishing the stated

picking function. Thus, Defendants' proposal should be rejected because § 112 ¶ 6 does not apply under these circumstances. *Envirco Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360, 1364-65 (Fed. Cir. 2000) (when the claim recites sufficient structure 112 ¶ 6 does not apply despite use of the word means in the disputed claim term).

C. Defendants' Proposed Construction of Obtaining Means Is Erroneous Because It Includes Structures Unrelated to the Recited Claim Function

Both parties agree that obtaining means should be construed in accordance with § 112 ¶ 6. Here, Defendants urge the Court to construe the necessary structure for this means-plus-function term as "obtaining means 50." Defendants Opening Brief, p. 25. Defendants again fail to identify the corresponding structure in the specification that performs the recited function, and obtaining means 50 obviously includes structure beyond what is necessary to perform the claimed function. For this reason, Defendants' proposal should be rejected.

V. CONCLUSION

For at least the foregoing reasons and those set forth in McKesson's Opening Claim Construction Brief, McKesson respectfully requests that the Court issue a Claim Construction Order consistent with McKesson's proposed constructions.

September 5, 2008

Respectfully submitted,



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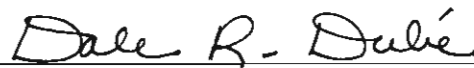
CERTIFICATE OF SERVICE

I hereby certify that on this 5th day of September, 2008, I served PLAINTIFF MCKESSON AUTOMATION, INC.'S RESPONSE CLAIM CONSTRUCTION BRIEF by hand delivery and CM/ECF, which will send electronic notification of such filing to the following:

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I also certify that, on this 5th day of September, 2008, I served the aforementioned document, by email and First Class Mail to the following participants:

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Dale R. Dubé

Exhibit J

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MCKESSON AUTOMATION, INC.,)	
)	
Plaintiff,)	
)	
v.)	C.A. No. 06-28 (SLR/LPS)
)	
SWISSLOG ITALIA S.P.A. and)	
TRANSLOGIC CORPORATION,)	
)	
Defendants.)	

SECOND REVISED JOINT CLAIM CONSTRUCTION STATEMENT

Pursuant to Magistrate Stark’s Order in this case, dated June 5, 2008, Plaintiff and Defendants submit the following list of agreed upon and disputed claim terms or phrases appearing in the asserted claims of U.S. Patent Nos. 5,468,110 (“the ‘110 patent”), and the 5,593,267 (“the ‘267 patent”). The parties agree that all claim terms not identified herein are not in dispute and, therefore, do not require construction. By proposing constructions for claim terms, agreeing with Plaintiff on constructions of claim terms, and/or accepting constructions of claim terms proposed by Plaintiff, Defendants do not waive and reserve all rights with respect to any invalidity contention outlined in Defendants’ Fourth Revised Prior Art and Invalidity Statement, except that Defendants agree not to base any invalidity contention under 35 U.S.C. section 112 on the language of a construction of a claim term that was previously proposed by Plaintiff and accepted herein by Defendants.

The parties filed their Joint Claim Construction Statement previously on June 16, 2008. Defendants believe that the recent Federal Circuit case of *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co. Ltd.*, 521 F.3d 1351 (Fed. Cir. April, 2008), attached hereto as Exhibit A, requires a Court to construe a disputed term even if the Court believes that the term should be

given its plain and ordinary meaning. For this reason, the parties have revised their constructions herein to provide the plain and ordinary meaning construction of terms that are in dispute and which were identified previously by at least one party as not requiring construction.

BLANK ROME LLP

MORRIS, NICHOLS ARSHT & TUNNELL LLP

/s/ Dale R. Dubé (#2863)

/s/ Julia Heaney (#3052)

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S.p.A. and Translogic Corporation*

September 2, 2008

U.S. PATENT NO 5,468,110

CLAIM TERM	CLAIM	AGREED UPON CONSTRUCTION
package holding means	1, 8	The disclosed function is the holding of packages. The corresponding structures are the rods, brackets, shelves and dividers as disclosed at positions 30, 25, 29 and 31 of, e.g., FIG. 3-6, and col. 5, lines 10-19 and 25-40.
means for moving the automated picking means to selected storage locations	1	The disclosed function is moving the automated picking means to the selected storage locations. The corresponding structure is a vehicle that travels over a track, and is driven by a drive system including a motor, as disclosed at col. 5, line 49 – col. 6, line 2 and Fig. 6.
means for moving the picking means over the track	22	The disclosed function is moving the picking means over the track. The corresponding structure is the drive system including a motor disclosed at col. 5, line 52-55 and FIG. 6.

CLAIM TERM	CLAIM	PLAINTIFF'S PROPOSED CONSTRUCTION	DEFENDANTS' PROPOSED CONSTRUCTION
x,y coordinate/ x,y coordinate location	1, 8	one or more points that designates the position of a package where the picking means selects, grabs and replaces packages. ¹	plain and ordinary meaning – <i>i.e.</i> , a location identifier “X,Y,” in which X designates a position of the location along an X-Axis and Y designates a position of the location along a Y-Axis. ²

¹ During the meet and confer on June 12-13, 2008 regarding the Joint Claim Construction Statement, Plaintiff informed Defendants of its intention to remove two instances of the term “in a plane” from its construction of “x,y coordinate” and “x,y coordinate location.” Defendants object to Plaintiff’s change in construction of these terms at this juncture and after initial and rebuttal reports of the parties’ technical experts have been served. Defendants have informed Plaintiff that they would also object to any attempt by Plaintiff to serve revised technical reports addressing these new constructions.

² On August 28, 2008 Defendants informed Plaintiff of their intention to add the term “X,Y” after the word “identifier” to their construction of the claim term “x,y coordinate” and “x,y coordinate location.” Plaintiff objects to Defendants’ change in construction of these terms after the close of expert discovery and the filing of the initial claim construction briefs. Plaintiff will also object to any attempts by Defendants to serve revised technical expert reports based on these new constructions.

CLAIM TERM	CLAIM	PLAINTIFF'S PROPOSED CONSTRUCTION	DEFENDANTS' PROPOSED CONSTRUCTION
picking means/automated picking means	1	The disclosed function is to hold packages and to select and place packages in the storage area locations. The corresponding structure is a device that includes a housing, a gripper, an extension rod and a storing rod as disclosed at col. 7, lines 57-64 and Fig. 7.	Function: "to hold packages, to select packages from the storage area locations and place packages in the storage area locations in accordance with computer controlled instructions" Corresponding Structure: picking means 38
package reader associated with the picking means	1	a device that provides the identity of a package to the computer directing the picking means	a package reader attached to the picking means

U.S. PATENT NO 5,593,267

CLAIM TERM	CLAIM	AGREED UPON CONSTRUCTION
means for moving the column with respect to the row	3	The disclosed function is the moving of the column with respect to the row. The corresponding structure is the drive system including a motor, as disclosed at col. 5, line 52 – col. 6, line 5 and FIG. 6.
means for storing a plurality of medicine packages/means for storing packages	4, 7	The disclosed function is the storing of a plurality of medicine packages. The corresponding structure is a storage rod as disclosed at col. 8, lines 18-23 and Figs. 7-11.
identifying means	4	The disclosed function is the identification of a package. The corresponding structure is the bar code reader as disclosed at col. 5, line 66 – col. 6, line 18.
means for producing a suction	7	The disclosed function is the production of a suction. The corresponding structure is the vacuum generator as disclosed at col. 7, line 48 – col. 8, line 7 and FIG. 11.
means for sensing when a package is properly positioned	7	The disclosed function is the sensing of a package. The corresponding structure is the vacuum sensor as disclosed at col. 7, line 48 – col. 8, line 18 and FIG. 11.

CLAIM TERM	CLAIM	PLAINTIFF'S PROPOSED CONSTRUCTION	DEFENDANTS' PROPOSED CONSTRUCTION
x, y coordinate location/x and y coordinate	1, 7	one or more points that designates the position of a package where the picking means selects, grabs and replaces packages. ³	plain and ordinary meaning – <i>i.e.</i> , a location identifier “X,Y,” in which X designates a position of the location along an X-Axis and Y designates a position of the location along a Y-Axis. ⁴
means for picking medicine packages from the support rods	1	The disclosed function is the picking of medicine packages from the support rods. The corresponding structure is a device that includes a housing, a gripper, an extension rod, and a storing rod as disclosed at col. 7, lines 57-64 and Fig. 7.	Function: “picking medicine packages from the support rods in accordance with instructions received from a computer” Corresponding Structure: Picking means 38
means for obtaining a medicine package/obtaining means	4	The disclosed function is the obtaining of a medicine package. The corresponding structure is a device including a suction head, vacuum generator and an extension rod as disclosed at col. 7, line 60 – col. 8, line 33 and FIGS. 7 and 11.	Function: “obtaining a medicine package” Corresponding Structure: obtaining means 50

³ During the meet and confer on June 12-13, 2008 regarding the Joint Claim Construction Statement, Plaintiff informed Defendants of its intention to remove two instances of the term “in a plane” from its construction of “x,y coordinate location” and “x and y coordinate.” Defendants object to Plaintiff’s change in construction of these terms at this juncture and after initial and rebuttal reports of the parties’ technical experts have been served. Defendants have informed Plaintiff that they would also object to any attempt by Plaintiff to serve revised technical reports addressing these new constructions.

⁴ On August 28, 2008 Defendants informed Plaintiff of their intention to add the term “X,Y” after the word “identifier” to their construction of the claim term “x,y coordinate location” and “x and y coordinate.” Plaintiff objects to Defendants’ change in construction of these terms after the close of expert discovery and the filing of the initial claim construction briefs. Plaintiff will also object to any attempts by Defendants to serve revised technical expert reports based on these new constructions.

CLAIM TERM	CLAIM	PLAINTIFF'S PROPOSED CONSTRUCTION	DEFENDANTS' PROPOSED CONSTRUCTION
picking means for picking packages from the support rods in accordance with instructions received from a computer	7	112 ¶6 construction not required. Plain and ordinary meaning – <i>i.e.</i> , a device having a housing, means for storing packages, means for producing a suction, a suction rod, and a means for sensing.	Function: “picking packages from the support rods in accordance with instructions received from a computer” Corresponding Structure: picking means 38.

2470891

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on September 2, 2008 I electronically filed the foregoing with the Clerk of the Court using CM/ECF which will send notification of such filing to the following:

Dale R. Dubé, Esquire
Blank Rome LLP

Additionally, I hereby certify that true and correct copies of the foregoing were caused to be served on September 2, 2008 upon the following individuals in the manner indicated

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EXHIBIT A

Westlaw.

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▷ O2 Micro Intern. Ltd. v. Beyond Innovation
 Technology Co., Ltd.
 C.A.Fed. (Tex.), 2008.

United States Court of Appeals, Federal Circuit.
 O2 MICRO INTERNATIONAL LIMITED, Plaintiff-
 Appellee,
 v.
 BEYOND INNOVATION TECHNOLOGY CO.,
 LTD., Defendant-Appellant,
 and FSP Group and SPI Electronic Co., Ltd.,
 Defendants-Appellants,
 and Lien Chang Electronic Enterprise Co., Ltd.,
 Defendant-Appellant.
Nos. 2007-1302, 2007-1303, 2007-1304.

April 3, 2008.
 Rehearing and Rehearing En Banc Denied June 11,
 2008.

Background: Owner of patents relating to inverter controllers, which convert low voltage direct current (DC) into higher voltage alternating current (AC), brought infringement action against competitors. The United States District Court for the Eastern District of Texas, T. John Ward, J., 2007 WL 869576, inter alia granted patent owner a permanent injunction. Competitors appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

- (1) competitors did not waive on appeal any objection to claim construction determined at Markman hearing;
- (2) arguments regarding the meaning and legal significance of "only if" limitation were improperly submitted to the jury; and
- (3) prosecution history estoppel barred patent owner from relying on the doctrine of equivalents.

Vacated and remanded.

West Headnotes

[1] Patents 291 ↪ 314(1)

291 Patents

291XII Infringement
 291XII(C) Suits in Equity
 291k314 Hearing
 291k314(1) k. In General. Most Cited

Cases

Alleged patent infringers did not have to renew their objections to claim construction order, which followed from a Markman hearing, by reasserting their objections when jury instructions were given, and therefore alleged infringers did not waive any objection to construction; parties' positions were fully litigated during Markman hearing, the alleged infringers' position was previously made clear to the district court, and the district court did not clearly indicate that it was open to changing its claim construction.

[2] Patents 291 ↪ 324.1

291 Patents
 291XII Infringement
 291XII(C) Suits in Equity
 291k324 Appeal
 291k324.1 k. In General. Most Cited

Cases

Alleged patent infringers did not waive objections to claim construction on appeal, in patent owner's infringement action, even though alleged infringers employed different arguments in support of their claim construction on appeal; infringers proposed same claim construction on appeal as was presented to the district court, and the new arguments simply incorporated an understanding of the parties' dispute that had developed through the course of litigation.

[3] Patents 291 ↪ 324.1

291 Patents
 291XII Infringement
 291XII(C) Suits in Equity
 291k324 Appeal
 291k324.1 k. In General. Most Cited

Cases

While a waiver to a patent's claim construction may occur if a party raises a new issue on appeal, waiver will not necessarily occur if a party simply presented new or additional arguments in support of the scope

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 521 F.3d 1351, 86 U.S.P.Q.2d 1304
521 F.3d 1351

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of its claim construction.

[4] Patents 291 ¶314(5)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k314 Hearing

291k314(5) k. Questions of Law or Fact. Most Cited Cases

Arguments regarding the meaning and legal significance of “only if” limitation in patent relating to inverter controllers, which convert low voltage direct current (DC) into higher voltage alternating current (AC), were improperly submitted to the jury in patent owner's infringement action; while the parties agreed that “only if” had a common meaning, they then proceeded to dispute the scope of that claim term with each party providing an argument identifying the alleged circumstances when the requirement specified by the claim term had to be satisfied, and therefore the “ordinary” meaning of the term did not resolve the parties' dispute, and claim construction required the court to determine what claim scope was appropriate.

[5] Patents 291 ¶157(1)

291 Patents

291IX Construction and Operation of Letters

Patent

291IX(A) In General

291k157 General Rules of Construction

291k157(1) k. In General. Most Cited

Cases

Patents 291 ¶314(5)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k314 Hearing

291k314(5) k. Questions of Law or Fact. Most Cited Cases

Purpose of patent claim construction is to determine the meaning and scope of the patent claims asserted to be infringed; when the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute.

[6] Patents 291 ¶161

291 Patents

291IX Construction and Operation of Letters Patent

291IX(A) In General

291k161 k. State of the Art. Most Cited

Cases

Words of a patent claim are generally given their ordinary and customary meaning, which is the meaning a term would have to a person of ordinary skill in the art after reviewing the intrinsic record at the time of the invention.

[7] Patents 291 ¶157(1)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(A) In General

291k157 General Rules of Construction

291k157(1) k. In General. Most Cited

Cases

A determination that a patent claim term needs no construction or has the plain and ordinary meaning may be inadequate when a term has more than one “ordinary” meaning or when reliance on a term's “ordinary” meaning does not resolve the parties' dispute.

[8] Patents 291 ¶165(3)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k165 Operation and Effect of Claims in

General

291k165(3) k. Construction of

Language of Claims in General. Most Cited Cases

District courts are not required to construe every limitation present in a patent's asserted claims; rather, claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement.

[9] Patents 291 ¶168(2.1)

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 521 F.3d 1351, 86 U.S.P.Q.2d 1304
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291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k168 Proceedings in Patent Office in General

291k168(2) Rejection and Amendment of Claims

291k168(2.1) k. In General. Most Cited Cases

Patents 291 ↪ 237

291 Patents

291XII Infringement

291XII(A) What Constitutes Infringement

291k233 Patents for Machines or Manufactures

291k237 k. Substitution of Equivalents.

Most Cited Cases

Doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes; however, when a patent claim is narrowed during prosecution, prosecution history estoppel may limit application of the doctrine of equivalents.

[10] Patents 291 ↪ 324.5

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k324 Appeal

291k324.5 k. Scope and Extent of Review in General. Most Cited Cases

An appellate court reviews issues relating to the application of patent prosecution history estoppel de novo.

[11] Patents 291 ↪ 168(3)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k168 Proceedings in Patent Office in General

291k168(3) k. Rejection and Amendment of Claims of Particular Patents. Most

Cited Cases

Feedback circuit equivalent, alleged by owner of patent relating to inverter controllers converting low voltage direct current (DC) into higher voltage alternating current (AC), that, during non-steady state operations, may have been operational even though claim language was not satisfied, was not tangential to reason for narrowing amendment made during prosecution history requiring that feedback control loop circuit control the conduction state of switches only if said feedback signal was above a predetermined threshold, and therefore patent owner failed to rebut *Festo* presumption that owner surrendered all territory between the original claim limitation and the amended claim limitation, as required to prevent prosecution history estoppel from barring patent owner from relying on the doctrine of equivalents.

[12] Patents 291 ↪ 312(1.6)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k312 Evidence

291k312(1) Presumptions and Burden of Proof

291k312(1.6) k. Laches and

Estoppel. Most Cited Cases

The inquiry into whether a patentee can rebut the *Festo* presumption, that patentee surrendered all territory between the original claim limitation and the amended claim limitation following narrowing amendment made during prosecution history for a substantial reason relating to patentability, under the "tangential" criterion focuses on the patentee's objectively apparent reason for the narrowing amendment; in order to maintain the public notice function of a patent, that reason should be discernible from the prosecution history record.

[13] Patents 291 ↪ 168(2.1)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k168 Proceedings in Patent Office in General

291k168(2) Rejection and Amendment of Claims

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291k168(2.1) k. In General. MostCited Cases

If the patentee fails to rebut the *Festo* presumption, that patentee surrendered all territory between the original claim limitation and the amended claim limitation following narrowing amendment made during prosecution history for a substantial reason relating to patentability, then prosecution history estoppel bars the patentee from relying on the doctrine of equivalents for the accused element.

[14] Patents 291 ↪ 168(2.1)291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k168 Proceedings in Patent Office in General

291k168(2) Rejection and Amendment of Claims

291k168(2.1) k. In General. Most

Cited Cases

Prosecution history estoppel for patents is a flexible doctrine, not a rigid one.

Patents 291 ↪ 328(2)291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited

Cases

6,259,615, 6,396,722, 6,804,129. Construed.

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Before LOURIE, Circuit Judge, CLEVINGER, Senior Circuit Judge, and PROST, Circuit Judge.

PROST, Circuit Judge.

Defendants-Appellants Beyond Innovation Technology Company Limited ("BiTEK"), SPI Electronic Company Limited and FSP Group (collectively, "SPI/FSP"), and Lien Chang Electronic Enterprise Company Limited ("Lien Chang") appeal a final judgment by the United States District Court for the Eastern District of Texas. O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., No. 2:04-CV-32, 2007 WL 869576 (E.D.Tex. Mar. 21, 2007). A jury found that Defendants-Appellants willfully induced the infringement of claims 1, 15, 35, and 39 of U.S. Patent No. 6,259,615 ("the '615 patent"), claims 12 and 16 of U.S. Patent No. 6,396,722 ("the '722 patent"), and claims 13, 16, and 17 of U.S. Patent No. 6,804,129 ("the '129 patent"), all of which are owned by Plaintiff-Appellee O2 Micro International Ltd. ("O2 Micro"). The district court entered a final judgment and permanent injunction. For the reasons explained below, we vacate and remand for further proceedings.

I. BACKGROUND

A. Patents-in-Suit

The patents-in-suit ^{FNI} are directed to DC-to-AC converter circuits, which convert low voltage direct current ("DC") into higher voltage alternating current ("AC"). Also called inverter controllers, these circuits may be used to control the amount of power delivered to cold cathode fluorescent lamps ("CCFLs") that are used to backlight the screens of laptop computers and televisions. When powered by a battery or other DC power source, a CCFL uses a DC-to-AC converter circuit because CCFLs are designed to run on AC power. The patents-in-suit describe a converter circuit that employs a feedback control loop to control the amount of power delivered from the DC power source (the "drive") to the CCFL (the "load").

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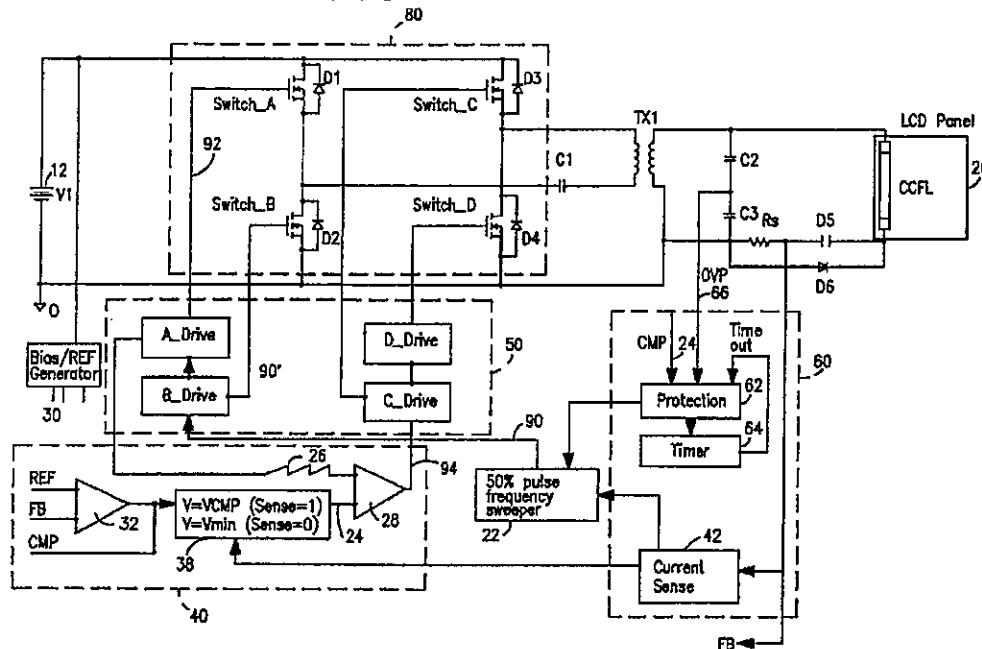
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FN1. The patents-in-suit are related-the '129 patent is a continuation of a continuation of the '722 patent, which is a continuation of the '615 patent-and share a common specification. For simplicity, we refer to the disclosure of the '615 patent and omit the parallel citations to the '722 patent and the '129 patent.

between the drive (12) and the load (20). Drive circuitry (50) associated with each switch determines when and how long a given switch will be turned on ("ON time"). If a pair of switches along a conduction path are ON simultaneously, the circuit will deliver more power to the load. Thus, by adjusting the overlap between switches' ON times, the circuit can precisely control the amount of power delivered to the load.

As shown in Figure 2 of the '615 patent, the converter circuit includes a number of switches (80) placed

*1355



'615 patent's Figure 2

The converter circuit uses a feedback control loop (40) to affect the switches' ON times. To the feedback control loop, the converter circuit provides a feedback signal (FB) indicative of the total current (and, thus, power) at the load and a reference voltage (REF) indicative of the desired load conditions (for example, the desired total current at the load). An error amplifier (32) compares the feedback signal (FB) and the reference voltage (REF) to produce a comparison signal (CMP). During normal operation, the drive circuitry (50) receives the comparison signal (94) and may use it to adjust the switches' ON times, thereby regulating the power to the load.

To protect the circuitry from damage during an open-circuit condition (such as when a CCFL breaks or becomes disconnected), the feedback signal (FB) may also be compared to a reference value (not shown in Figure 2) at the current sense comparator (42). This reference value preferably reflects the minimum or maximum current permitted by the system. Thus, when the value of the feedback signal (FB) is within a permitted range (i.e., during normal operation), the current sense comparator (42) allows the comparison signal (CMP) to flow through switch 38; however, when the value of the feedback signal is outside that range (e.g., during an open circuit or short circuit condition), the current sense comparator substitutes a minimum voltage (Vmin) for the comparison signal (CMP) at switch 38. In the latter case, the minimum voltage minimizes the overlap of the switches' ON times, reducing the power to a safer

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level while avoiding shutdown if the lamp remains operable.

During prosecution of the application, the examiner rejected the '615 patent under 35 U.S.C. § 103 as unpatentable over a combination of U.S. Patent No. 5,384,516 to Kawabata ("Kawabata") and U.S. Patent No. 6,011,360 to Gradzki ("Gradzki"). *1356 The examiner observed that the feedback loop described in the originally filed claims was obvious, stating that "Gradzki et al. teaches the utilization of the technique for a feedback loop circuit between the load and the drive circuitry supplying a feedback signal indicative of power being supplied to the load." J.A. 7638. The examiner found that, like the application's pending claims, Gradzki discloses an inverter controller that regulates lamp power irrespective of the level of the feedback signal.

In response to the examiner's rejection, O2 Micro added a limitation to each of the independent claims. Specifically, O2 Micro amended Claim 1 of the '615 patent to require that the feedback control loop circuit control the conduction state of the switches "only if said feedback signal is above a predetermined threshold" (the " 'only if' limitation"). O2 Micro provided little explanation for the amendment, stating that "[i]n contrast to [the prior art], Applicant's invention of independent claim 1 requires, *inter alia*, a DC/AC converter circuit that includes a feedback control loop circuit ... adapted to generate a second pulse signal ...*only if said feedback signal is above a predetermined threshold.*" J.A. 7626. After receiving this amendment, the examiner issued a notice of allowance.

Claim 1 of the '615 patent is representative of the asserted claims for the issues presented by this appeal. As issued, it requires, in relevant part, a DC/AC converter circuit comprising:

a feedback control loop circuit receiving a feedback signal indicative of power being supplied to said load, and adapted to generate a second signal pulse signal for controlling the conduction state of said second plurality of switches only if said feedback signal is above a predetermined threshold;

'615 patent col. 10 l.67-col. 11 l.5.

B. Accused Devices

BiTEK manufactures and sells inverter controllers. SPI/FSP and Lien Chang manufacture and sell inverter modules incorporating BiTEK's inverter controllers. O2 Micro alleged that four of BiTEK's products (BIT3105, BIT3106, BIT3107 and BIT3193) infringe one or more of the patents-in-suit. The parties concede that, for the purposes of this litigation, the first three products (BIT3105, BIT3106, and BIT3107) are the same, and the fourth (BIT3193) differs from the others in only one material respect.

BiTEK's inverter controllers have feedback control loops. The controllers are capable of shutting off the feedback signal's control over power when a feedback signal falls below a predetermined threshold. The parties dispute whether this feature satisfies the "only if" limitation recited by the asserted claims, which requires "a feedback control loop circuit ... adapted to generate a second signal pulse signal for controlling ... [the] switches *only if* said feedback signal is above a predetermined threshold." (emphasis added).

BiTEK submits that its inverter controllers do not satisfy this limitation in two circumstances because, during those circumstances, the feedback signal in BiTEK's switch continues to control the power delivered to the load even though the feedback signal falls below the predetermined threshold. The first circumstance is when an unlit lamp lights up (called "start-up" or "ignition"). BiTEK asserts that, during the ignition period, the feedback signal is below the predetermined threshold, but the feedback circuit still controls power delivered to the load, in violation of the claims' requirements. This *1357 first circumstance applies to all four products. The second circumstance applies only to the BIT3193 product, which implements a 32-microsecond delay. During this delay period, the feedback circuit is designed to continue to rely on the feedback signal to control the power for 32 microseconds after the feedback signal falls below the predetermined threshold. Such a delay was purposely created to ensure that the feedback signal would not cease to control the power to the load because of a temporary fall below the threshold.

On appeal, BiTEK relies exclusively on these two circumstances to avoid infringement under the claim,

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asserting that the “only if” limitation is therefore not satisfied. O2 Micro, on the other hand, asserts that this limitation is satisfied by the accused devices. First, O2 Micro argues that the claims do not apply in the two circumstances identified by BiTEK. Second, O2 Micro disputes BiTEK's allegations regarding the operation of its devices during those circumstances and, consequently, asserts that, even if the claims apply, the accused devices still infringe.

C. District Court Proceedings

In January 2004, O2 Micro filed suit against BiTEK, SPI/FSP, and Lien Chang in the United States District Court for the Eastern District of Texas. O2 Micro alleges that BiTEK's inverter controllers infringe several claims of the '615 patent, the '722 patent, and the '129 patent. While Defendants-Appellants are foreign entities that operate abroad, Defendants-Appellants' inverter controllers and modules are used in monitors sold in the United States.

The district court held a *Markman* hearing in August 2005. The parties agreed, for the most part, that a previously issued claim construction order (from a different case pending before the same court) controlled in this case. *See O2 Micro Int'l Ltd. v. Sumida Corp.*, 2:03-CV-07 (E.D.Tex. Mar. 8, 2005) (claim construction order construing claim language in the same patents). However, the parties presented a handful of additional terms for the court to construe. The claim term “only if” (one of the additional terms disputed by the parties) is the only term whose construction was appealed to this court.

At the *Markman* hearing, Defendants-Appellants argued that the district court should construe the claim term “only if,” but disagreed regarding what specific meaning should be ascribed to it. Defendants-Appellants BiTEK and Lien Chen asserted that “only if” should mean “exclusively or solely in the event that,” while defendant SPI/FSP asserted that it should mean “never except when.” In spite of the differences in word choice, Defendants-Appellants seemed to agree that these constructions are substantially identical in meaning. O2 Micro, on the other hand, maintained that no construction was necessary because the claim term “only if” consists of “two simple, plain English words.” During the hearing, the district court astutely summarized the

dispute as concerning whether or not “there can be an exception” to the “only if” language. However, in its *Markman* order, the district court ruled that this term “needs no construction” because it “has a well-understood definition, capable of application by both the jury and this court in considering the evidence submitted in support of an infringement or invalidity case.” *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, No. 2:04-CV-32 (E.D.Tex. Aug. 26, 2005).

During pre-trial proceedings, BiTEK filed a motion in limine seeking to prevent O2 Micro from alleging infringement under the doctrine of equivalents as to the “only if” limitation, asserting that prosecution*1358 history estoppel barred that theory. The district court originally granted this motion, instructing O2 Micro to first approach the bench before “offering any evidence relating to infringement of the ‘only if’ limitation under the doctrine of equivalents.” *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, No. 2:04-CV-32 (E.D.Tex. May 2, 2006). However, after considering supplemental briefing, the district court changed course, ruling that O2 Micro was allowed to argue that the “only if” limitation is infringed under the doctrine of equivalents. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, No. 2:04-CV-32 (E.D.Tex. May 8, 2006). Without any analysis, the district court's opinion simply stated, “The court ... is persuaded by O2's argument that the amendment bears only a tangential relationship to the equivalent at issue.” *Id.* (also citing *Insituform Techs., Inc. v. CAT Contracting, Inc.*, 385 F.3d 1360, 1370 (Fed.Cir.2004)).

At trial, the “only if” limitation was a key issue disputed by the parties. O2 Micro presented evidence that the accused devices satisfied the “only if” limitation both literally and under the doctrine of equivalents. Defendants-Appellants presented evidence to the contrary. Moreover, both parties presented arguments regarding whether or not the “only if” claim language allows exceptions.

After trial, the parties submitted proposed verdict forms that asked separate questions regarding literal infringement and infringement under the doctrine of equivalents. The district court generated a jury form containing general questions regarding “infringement” and included jury instructions

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explaining that a claim limitation may be satisfied either literally or under the doctrine of equivalents. After deliberations, the jury found that each Defendant-Appellant had induced infringement of each asserted claim of each patent. The jury also found that Lien Chang contributorily infringed and all three Defendants-Appellants willfully infringed. Defendants-Appellants timely appealed to this court. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

II. DISCUSSION

As noted above, the district court provided a general verdict form that asked the jury whether each defendant “infringe[d]” each of the asserted claims. The corresponding jury instructions explained that infringement may be found either literally or under the doctrine of equivalents. On appeal, Defendants-Appellants allege error in both theories of infringement liability. First, Defendants-Appellants contend that the district court’s failure to construe the claim term “only if” was legal error that infected the literal infringement inquiry. Second, Defendants-Appellants assert that the jury should not have been permitted to find infringement under the doctrine of equivalents. We address each of these arguments in turn.

A. Claim Construction

With respect to literal infringement, the parties dispute whether the district court’s failure to construe the claim term “only if” was legal error. As a threshold matter, however, O2 Micro argues that Defendants-Appellants waived any challenge to the construction of “only if” by: (1) failing to object to the jury instructions as lacking a construction of that claim term and (2) offering a different construction of the claim term on appeal than was presented to the district court. Before addressing the claim construction issue on the merits, we turn to these waiver arguments.

[1] First, O2 Micro contends that Defendants-Appellants have waived any challenge to the construction of “only if” because Defendants-Appellants failed to *1359 object to the jury instructions as lacking a construction of that term. O2 Micro acknowledges that Defendants-Appellants presented these arguments during the Markman

hearing and that the district court issued a claim construction order months before trial. O2 Micro asserts, however, that a party waives its objections to a claim construction by not objecting to the jury instructions containing (or, in this case, lacking) that construction.

In response, Defendants-Appellants argue that the purpose of a Markman hearing is to determine the meaning of claim terms. A claim construction order always dictates how the court will instruct the jury regarding a claim’s scope. Because these issues were fully litigated and decided at the Markman stage of the litigation, Defendants-Appellants assert that no objection to the jury instruction was required to preserve error. We agree.

“When the claim construction is resolved pre-trial, and the patentee presented the same position in the Markman proceeding as is now pressed, a further objection to the district court’s pre-trial ruling may indeed have been not only futile but unnecessary.” Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 381 F.3d 1371, 1381 (Fed.Cir.2004) (under Seventh Circuit law). The same holds true in the Fifth Circuit. Taita Chem. Co. v. Westlake Styrene, LP, 351 F.3d 663, 667 (5th Cir.2003) (stating that there is no need to object where a litigant “had previously filed sufficient objections”); Rizzo v. Children’s World Learning Ctrs., Inc., 213 F.3d 209, 223 (5th Cir.2000) (“Failure to object [to a proposed jury instruction] may be disregarded if the party’s position has previously been made clear to the court and it is plain that a further objection would have been unavailing.”); Bender v. Brumley, 1 F.3d 271, 277 (5th Cir.1993) (finding “oral on-the-record objections to the jury charge” were not required to preserve objection where appellant “had earlier filed written objections to the proffered jury instructions”). The district court in this case, as in Cardiac Pacemakers, rendered a claim construction order following a Markman hearing during which the parties’ positions were fully litigated. Because Defendants-Appellants’ position was previously made clear to the district court and the district court did not clearly indicate that it was open to changing its claim construction, Defendants-Appellants need not have renewed their objections by reasserting them when jury instructions were given.

[2] Second, O2 Micro also asserts that Defendants-

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Appellants have waived their proposed claim constructions of “only if” by asserting a new construction on appeal. Contending that Defendants-Appellants’ current construction is that “only if” allows for “no exceptions,” O2 Micro notes that the word “exception” was never used in Defendants-Appellants’ claim construction briefs. Defendants-Appellants respond by re-affirming the construction proposed to the district court—namely, “only if” means “solely or exclusively in the event that.” Defendants-Appellants argue that, while the arguments advanced in support of their construction may have changed, the construction itself remains the same. Defendants-Appellants note that these new arguments simply recognize that the effect of their proposed construction is to prohibit exceptions to the “only if” limitation.

[3] We agree with Defendants-Appellants that no waiver has occurred. While “a waiver may occur if a party raises a new issue on appeal [a] waiver will not necessarily occur ... if a party simply presented new or additional arguments in support of ‘the scope of its claim construction....’” CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1370-71 (Fed.Cir.2002) (citation omitted). Defendants-Appellants*1360 propose the same construction on appeal as was presented to the district court. While Defendants-Appellants employ different arguments in support, these new arguments simply incorporate an understanding of the parties’ dispute that has developed through the course of litigation. At the claim construction hearing, the district court astutely recognized that the dispute “boils down to whether [the court] believe[s] there can be an exception.” Thus, we conclude Defendants-Appellants have not waived these arguments.

[4] Accordingly, we turn to the merits of Defendants-Appellants’ appeal of the district court’s failure to construe the claim term “only if.” On appeal, Defendants-Appellants argue that the district court’s failure to construe the claim term “only if” was error because the parties disputed whether or not this claim language allows for exceptions. Defendants-Appellants assert that, because this presents an issue of claim construction, it is a question of law that must be decided by the court. In Defendants-Appellants’ view, by failing to provide a construction of this term, the district court effectively submitted a legal question to the jury. Defendants-Appellants also

argue that the district court erred by allowing the jury to reach a verdict based upon an erroneous legal conclusion—namely, that “only if” allows exceptions.

O2 Micro counters that the claim term “only if” does not need to be construed because the parties agree that the term is a “common term” with a “common meaning.” O2 Micro notes that this court has repeatedly held that a district court is not obligated to construe terms with ordinary meanings,^{FN2} lest trial courts be inundated with requests to parse the meaning of every word in the asserted claims.

FN2.E.g., Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc., 249 F.3d 1341, 1349 (Fed.Cir.2001) (finding no error in non-construction of “melting”); Mentor H/S, Inc. v. Med. Device Alliance, Inc., 244 F.3d 1365, 1380 (Fed.Cir.2001) (finding no error in court’s refusal to construe “irrigating” and “frictional heat”).

[5] The purpose of claim construction is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed.Cir.1995) (en banc), *aff’d* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). When the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute. *See id.* at 979 (holding that claim construction is a matter of law).

[6] Words of a claim are generally given their ordinary and customary meaning, which is the meaning a term would have to a person of ordinary skill in the art after reviewing the intrinsic record at the time of the invention. Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed.Cir.2005) (en banc). “In some cases, the ordinary meaning of claim language ... may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314. However, in many cases, the meaning of a claim term as understood by persons of skill in the art is not readily apparent. *Id.*

In this case, the parties dispute whether or not the “only if” limitation allows for exceptions. O2 Micro

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asserts that the claims would be understood by one of ordinary skill in the art to only apply to “the steady state operation of the switching circuit.” Defendants-Appellants disagree and submit that the claims apply at all times-not just to steady state operation-with no exceptions. There are two circumstances*1361 in which Defendants-Appellants assert that the “only if” limitation is not satisfied: (1) the pre-ignition, start-up phase, and (2) a 32-microsecond delay. Accordingly, Defendants-Appellants seek a construction that specifies that “only if” has no exceptions and is not limited to “steady state operation.”

During the claim construction hearing, the district court acknowledged that this dispute over the scope of the asserted claims “boils down to whether I believe there can be an exception.” However, the district court declined to construe this term, stating:

The term “only if” needs no construction aside from the construction previously adopted by the court for the phrases in which the term appears. It is true, as defendants argue, that Elektro Instrument, S.A. v. O.U.R. Scientific International, Inc., 214 F.3d 1302 (Fed.Cir.2000), applies the ordinary meaning of “only” (being solely; exclusively) to a claim term and evaluates the evidence in that light. Nothing in Elektro Instrument, however, requires the court to construe claim terms that have a well-understood meaning. “Only if” has a well-understood definition, capable of application by both the jury and this court in considering the evidence submitted in support of an infringement or invalidity case.

O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., No. 2:04-CV-32, slip op. at 2 (E.D.Tex. Aug. 26, 2005). We find this decision to be in error because, while Elektro Instrument may not require the court to construe this claim term, we find that Markman does.

The parties presented a dispute to the district court regarding the scope of the asserted claims-What do the patents mean when they say that the feedback signal controls power “only if said feedback signal is above a predetermined threshold”? O2 Micro contends that this “only if” limitation only applies during “steady state operation,” while Defendants-Appellants contend that the “only if” limitation applies at all times without exception. This dispute

over the scope of the asserted claims is a question of law. In deciding that “ ‘only if’ needs no construction” because the term has a “well-understood definition,” the district court failed to resolve the parties’ dispute because the parties disputed not the *meaning* of the words themselves, but the *scope* that should be encompassed by this claim language.

[7] A determination that a claim term “needs no construction” or has the “plain and ordinary meaning” may be inadequate when a term has more than one “ordinary” meaning or when reliance on a term’s “ordinary” meaning does not resolve the parties’ dispute. In this case, for example, the parties agreed that “only if” has a common meaning, but then proceeded to dispute the scope of that claim term, each party providing an argument identifying the alleged circumstances when the requirement specified by the claim term must be satisfied (e.g., at all times or during steady state operation). In this case, the “ordinary” meaning of a term does not resolve the parties’ dispute, and claim construction requires the court to determine what claim scope is appropriate in the context of the patents-in-suit. This court has construed other “ordinary” words for these and other related reasons. See, e.g., Nystrom v. TREX Co., 424 F.3d 1136, 1143 (Fed.Cir.2005) (construing “board” in light of intrinsic record); Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 375 F.3d 1341, 1350 (Fed.Cir.2004) (construing “golden brown” even though colors “are commonly used terms with well-accepted plain definitions that rarely need construction”), *rev’d on other* *1362 *grounds*, 546 U.S. 394, 126 S.Ct. 980, 163 L.Ed.2d 974 (2006); Toro Co. v. White Consol. Indus., Inc., 199 F.3d 1295, 1299 (Fed.Cir.1999) (construing “cover,” “included,” “attachment,” and “removable”).

When the district court failed to adjudicate the parties’ dispute regarding the proper scope of “only if,” the parties presented their arguments to the jury. By failing to construe this term, the district court left the jury free to consider these arguments. O2 Micro presented expert testimony to support its argument that the claim limitation “only if” applies only during certain periods of operation-“normal operation”-and that this claim limitation “has nothing to do with start-up.” O2 Micro also brought the inventor of the patents-in-suit to testify regarding the meaning of “only if”:

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Q: What did the additional language, "only if said feedback signal is above a predetermined threshold," pertain to?

A: Actually, in my opinion, specification did not change. "Only if," between my patent lawyer and examiner, they added in to try to clarify, make the entire invention more easier to understand. I think that's what it is. To me, there's no change to my original invention's intent.

....

Q: So if the only time it makes any sense to use feedback to control power to a lamp is after it's lit, after this threshold is reached, what did you give up, if anything, by adding the "only if" language to the claims?

A: I don't think I gave up anything. I think it just make it clear that you and I can understand.

Only when the lamp is lit ... we control power at that time.

J.A. 6550-51. Likewise, Defendants-Appellants argued to the jury that "only if" does not allow for exceptions. For the reasons stated, the parties' arguments regarding the meaning and legal significance of the "only if" limitation were improperly submitted to the jury.^{FN3}

^{FN3}. We note, in passing, that the parties' claim construction arguments are fraught with problems. First, an inventor's self-serving statements are rarely relevant to the proper construction of a claim term. *Bell & Howell Document Mgmt. Prods. v. Altek Sys.*, 132 F.3d 701, 706 (Fed.Cir.1997). Second, the parties' claim construction arguments appear to contain no support from the intrinsic record. See *Phillips*, 415 F.3d at 1314-19 (emphasizing the importance of the intrinsic record in claim construction). These deficiencies support the rationale underlying the rule that the court, and not the jury, should resolve claim construction disputes. See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-89, 116

S.Ct. 1384, 134 L.Ed.2d 577 (1996) (explaining why judges "are the better suited to find the acquired meaning of patent terms").

[8] We, however, recognize that district courts are not (and should not be) required to construe every limitation present in a patent's asserted claims. See, e.g., *Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc.*, 249 F.3d 1341, 1349 (Fed.Cir.2001) (deciding that disputed issue was the proper application of a claim term to an accused process rather the scope of the term); *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed.Cir.1997) (Claim construction "is not an obligatory exercise in redundancy."). Rather, "[c]laim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement." *U.S. Surgical*, 103 F.3d at 1568. When the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it. Because we determine that *1363 the district court is in the best position to determine the proper construction of this claim term in the first instance, we remand for further proceedings consistent with this opinion.^{FN4}

^{FN4}. O2 Micro also argues that, if the failure to construe "only if" was error, it was not prejudicial error because O2 Micro presented evidence sufficient to prove literal infringement under the construction proposed by Defendants-Appellants. Defendants-Appellants, on the other hand, contend that a construction of "only if" would certainly have changed the result. We do not find the infringement evidence to be clearly in favor of either party, and cannot conclude that the lack of a construction did not result in harm.

B. Doctrine of Equivalents

[9][10] We turn now to Defendants-Appellants' arguments with respect to the doctrine of equivalents.^{FN5} "The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial

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changes.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 733, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002). However, when a patent claim is narrowed during prosecution, prosecution history estoppel may limit application of the doctrine of equivalents. *Int’l Rectifier Corp. v. IXYS Corp.*, 515 F.3d 1353, 1358 (Fed.Cir.2008). “[W]e review issues relating to the application of prosecution history estoppel *de novo*.” *Conoco, Inc. v. Energy & Envtl. Int’l, L.C.*, 460 F.3d 1349, 1357 (Fed.Cir.2006).

FN5. O2 Micro asserts that the jury verdict, which found “infringement,” should not be vacated unless we find error in *both* theories of liability (i.e., literal infringement and infringement under the doctrine of equivalents). Under O2 Micro’s theory, the jury verdict must be upheld if the jury could have found infringement under either theory because Defendants-Appellants failed to object to the district court’s use of a general verdict form. Because we find error in both literal infringement and infringement under the doctrine of equivalents, we need not decide this issue.

On appeal, Defendants-Appellants argue that the district court erred in allowing the jury to find infringement under the doctrine of equivalents. Defendants-Appellants contend that, because the claim term “only if” was added during prosecution to overcome a prior art rejection, the *Festo* presumption should apply. According to Defendants-Appellants, because O2 Micro has failed to rebut this presumption, it should not have been allowed to argue that the accused devices infringe under the doctrine of equivalents. Accordingly, Defendants-Appellants find error in the jury instruction allowing for infringement under the doctrine of equivalents and O2 Micro’s arguments at trial alleging infringement on this basis.

O2 Micro agrees that the addition of “only if” constituted a narrowing amendment made for a substantial reason relating to patentability. However, O2 Micro appears to offer two alternate theories for why *Festo* should not apply. At the district court, O2 Micro attempted to rebut the *Festo* presumption by arguing that the alleged equivalent is merely tangential to this amendment. On appeal, O2 Micro

supplements this argument, asserting that the doctrine of equivalents should presumptively be available for *other* claim terms (namely, “feedback signal” and “adjustment”) because these terms were not added by amendment.

We agree with Defendants-Appellants that prosecution history estoppel prevents application of the doctrine of equivalents for the “only if” limitation. The parties agree that the “only if” limitation was added to the claims by a “narrowing amendment ... made for a substantial reason relating to patentability.” See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359, 1367 (Fed.Cir.2003) (en banc). Thus, the *Festo* presumption applies*1364 to this limitation, and, in order to avail itself of the doctrine of equivalents, O2 Micro must rebut the “presumption that the patentee has surrendered all territory between the original claim limitation and the amended claim limitation.” *Id.*; accord *Festo*, 535 U.S. at 740, 122 S.Ct. 1831 (“[T]he patentee should bear the burden of showing that the amendment does not surrender the particular equivalent in question.”). The Supreme Court provided three vehicles^{FN6} through which a plaintiff may do so. *Festo*, 344 F.3d at 1368. Neither party has argued either that the equivalent was unforeseeable or that there was “some other reason” why the patentee could not have described the alleged equivalent. See *id.* Accordingly, we turn directly to the issue of whether the rationale behind the narrowing amendment was merely tangential (i.e., peripheral, or not directly relevant) to the alleged equivalent. See *id.*

FN6. The three vehicles are: “(1) ‘the alleged equivalent would have been unforeseeable at the time ... the narrowing amendment’ was made; (2) ‘the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent’ at issue; and (3) ‘there was “some other reason” suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent.’ ” *Honeywell Int’l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1140 (Fed.Cir.2004) (quoting *Festo*, 344 F.3d at 1368).

[11][12][13] “[T]he inquiry into whether a patentee

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can rebut the *Festo* presumption under the 'tangential' criterion focuses on the patentee's *objectively apparent* reason for the narrowing amendment." *Id.* at 1369 (emphasis added). In order to maintain the public notice function of a patent, "that reason should be discernible from the prosecution history record." *Id.*; see *id.* at 1371-72 (holding that amendment was not tangential to accused equivalent because the prosecution history reveals no reason for the amendment); *Biagro W. Sales, Inc. v. Grow More, Inc.*, 423 F.3d 1296, 1306 (Fed.Cir.2005) ("[W]hether the patentee has overcome the presumption on this ground is determined by the court on the basis of the public record."). "[I]f the patentee fails to rebut the *Festo* presumption, then prosecution history estoppel bars the patentee from relying on the doctrine of equivalents for the accused element." *Festo*, 344 F.3d at 1367.

In ruling that the doctrine of equivalents was available with respect to the "only if" limitation, the district court simply stated that it was "persuaded by O2's argument that the amendment bears only a tangential relationship to the equivalent at issue." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, No. 2:04-CV-32 (E.D.Tex. May 8, 2006). Without the benefit of the district court's explanation of its rationale, we examine the prosecution history and parties' arguments to the district court.

During prosecution, the examiner rejected the '615 patent as obvious in light of Gradzki. Gradzki discloses an inverter controller that regulates lamp power irrespective of the level of the feedback signal. In response to the examiner's rejection, O2 Micro added the "only if" language to the independent claims, amending claim 1 of the '615 patent, for example, to require that the feedback control loop circuit controls the conduction state of the switches "only if said feedback signal is above a predetermined threshold." O2 Micro provided little explanation for the amendment, merely stating:

[T]he Examiner looks to Gradzki et al. as disclosing a feedback technique to generate a feedback signal indicative of power being supplied to the load. Significantly, however, Gradzki et al. discloses a feedback system, maintains [sic] the voltage at the CRECT pin equal to the voltage at the DIN pin, thereby *1365 regulating lamp power

(Gradzki et al., column 4, lines 64-67).

In contrast to [the prior art], Applicant's invention of independent claim 1 requires, *inter alia*, a DC/AC converter circuit that includes a feedback control loop circuit between the load and the drive circuitry receiving a feedback signal indicative of power supplied to the load and adapted to generate a second pulse signal for controlling the conduction state of a second plurality of switches *only if said feedback signal is above a predetermined threshold*. Applicant's invention of independent claim 18 has been similarly amended.

J.A. 7626.

[14] To begin, O2 Micro correctly notes that prosecution history estoppel is a "flexible" doctrine, not a "rigid" one. See *Festo*, 535 U.S. at 738, 122 S.Ct. 1831. O2 Micro then asserts that "the 'only if' language distinguished Gradzki by claiming a feedback system responsive to the feedback signal's *being above or below a predetermined threshold*," which is tangential to whether or not the feedback signal is used during "ignition of the lamp" and other non-steady state operations. Essentially, O2 Micro argues that exceptions to the "only if" limitation (e.g., during non-steady state operations) are merely tangential to the limitation itself. We find this argument to be without merit. The "objectively apparent" reason for the patentee's amendment was to require the feedback circuit to be operational "only if said feedback signal is above a predetermined threshold," as the claim language clearly states. No other reason is provided or suggested by the prosecution history. The equivalent alleged by O2 Micro is a feedback circuit that, during non-steady state operations, may be operational even though the claim language is *not* satisfied (i.e., the feedback signal is not above the predetermined threshold). This equivalent is simply not tangential to the reason for the amendment. Thus, it was error for the district court to allow the jury to consider infringement under the doctrine of equivalents.

On appeal, O2 Micro supplements its argument supporting the doctrine of equivalents instruction by asserting that the instruction was proper because the jury could have found that *other* claim terms were infringed by the doctrine of equivalents. Noting that

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the terms “feedback signal” and “adjustment” were present in the originally filed claims, O2 Micro argues that its expert's equivalents analysis focused on *these* terms, not the “only if” claim language. O2 Micro also alleges that the doctrine of equivalents instruction would not be error so long as the jury could have found *any* limitation to be met by equivalents.

The record, however, does not support this argument. The district court's equivalents ruling focused on “only if,” not “feedback signal” or “adjustment.” Defendants-Appellants original motion in limine sought to prevent O2 Micro from arguing equivalents to “only if.” The district court's decisions recognize that this was the claim term at issue for the purposes of these discussions. At trial, O2 Micro asked its expert, Dr. Rhyne: “[D]o the ‘only if’ limitations also infringe under the doctrine of equivalents?” J.A. 6328. In response, Dr. Rhyne explained why the reaction of the circuit was “essentially the same as it would be even if the feedback were not present.” *Id.*

O2 Micro points to no portion of the record where it argued that the accused devices satisfied the “feedback signal” or “adjustment” limitations under the doctrine of equivalents. In O2 Micro's brief, it asserts that only three pages of trial testimony directly addressed the issue of equivalents; however, in these pages, O2 Micro's expert opines that the asserted *1366 equivalents are insubstantially different from the “only if” limitation, with no discussion regarding either “feedback signal” or “adjustment.” While O2 Micro points to two additional excerpts of the trial transcript, the generalized testimony regarding “virtually insignificant” current flow is insufficient to establish that either the “feedback signal” or “adjustment” limitations were infringed under the doctrine of equivalents. See *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997) (“[T]he doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole.”); *Tex. Instruments, Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1567 (Fed.Cir.1996) (“Generalized testimony as to the overall similarity between the claims and the accused infringer's product or process will not suffice [to prove infringement under the doctrine of equivalents].”).

Accordingly, we agree with Defendants-Appellants that the district court erred in allowing the jury to find infringement under the doctrine of equivalents. Because we vacate the jury verdict, the remaining issues raised by Defendants-Appellants (which are premised on that jury verdict) are rendered moot.

III. CONCLUSION

For the above reasons, we vacate the jury verdict, the final judgment of infringement, and the permanent injunction, and we remand to the district court for further proceedings consistent with this opinion.

COSTS

Each party shall bear its own costs.

VACATED AND REMANDED.

C.A.Fed. (Tex.),2008.

O2 Micro Intern. Ltd. v. Beyond Innovation Technology Co., Ltd.

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Exhibit K



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Cartesian
coordinate

Main Entry: **Cartesian coordinate**

Function: *noun*

Date: 1887

1 : either of two coordinates that locate a point on a plane and measure its distance from either of two intersecting straight-line axes along a line parallel to the other axis

2 : any of three coordinates that locate a point in space and measure its distance from any of three intersecting coordinate planes measured parallel to that one of three straight-line axes that is the intersection of the other two planes

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